Listing of Claims

This listing of claims 1-6 will replace all prior versions, and listing of claims in the application.

1. (Currently Amended) A method for detecting malicious scripts using a static analysis, comprising the step of:

checking <u>a script to determine</u> whether a series of methods constructing a malicious code pattern exist and whether parameters and return values associated between the methods match each other,

wherein the checking step comprises the steps of:

- <u>a)</u> classifying, by modeling a malicious behavior to include unit behaviors each of which is composed of sub-unit behaviors or one or more method calls,
- b) generating a matching rule by converting each identified unit behavior and method call sentence into said a-matching rule for defining sentence types to be detected in script codes, said matching rule comprising rule identifiers and sentence patterns to be detected and
- <u>c)</u> generating at least one relation rule for defining a relation between rule variables used in the sentences satisfying the matching rule;
 - <u>d) identifying generating instances of the matching rule by:</u>
- i) searching for code patterns matched with the matching rule from a relevant script code to be detected,
- \underline{ii}) extracting parameters of functions used in the searched code patterns; and
 - iii) storing the extracted parameters in the rule variables; and
- <u>e) identifying generating</u> instances of the relation rule by searching for instances of the matching rule satisfying the <u>relation relations</u>-rule from <u>the a-set</u> of the generated instances of the matching rule.

- 2. (Currently Amended) The method according to claim 1, wherein the matching rule is composed of rule identifiers and sentence patterns constructing malicious behavior and having have the same grammar as a language of the scripts to be detected, and wherein the relation rule comprises conditional expressions (Cond) in which conditions satisfying the relevant rule are described, and action expressions (Action) in which contents to be executed are described when the conditions in the conditional expressions are satisfied.
- 3. (Original) The method according to claim 2, wherein the relation rule further includes preconditions (Precond) in which conditions that should be satisfied prior to the conditions in the conditional expressions are described, and the action expressions describe contents that will be executed when both the conditional expressions and the preconditions are satisfied.
- 4. (New) The method according to claim 1, further comprising the step of converting the script into a format suitable for static analysis.
- 5. (New) The method according to claim 1, further comprising the step of reporting identified instances of the matching rule and relation rule in a result report process.
- 6. (New) The method according to claim 1, wherein the relation rule comprises conditional expressions (Cond) in which conditions satisfying the relevant rule are described, and action expressions (Action) in which contents to be executed are described when the conditions in the conditional expressions are satisfied.